

People Owned Power

Building distributed power plants across our homes





Solar power station plans for brewery

By AMIE MORRELL

Environmental

WINDMILL plans are in the pipeline to make Harvey's Brewery a community-owned solar power station.

The plan is to generate power from the roof of the Harvey's Brewery building, which is currently used as a storage and distribution warehouse. The plan is to generate power from the roof of the Harvey's Brewery building, which is currently used as a storage and distribution warehouse.

There are already plans to build a solar power station on the roof of the Harvey's Brewery building, which is currently used as a storage and distribution warehouse. The plan is to generate power from the roof of the Harvey's Brewery building, which is currently used as a storage and distribution warehouse.

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GB Grid Carbon Intensity



63
gCO₂/kWh

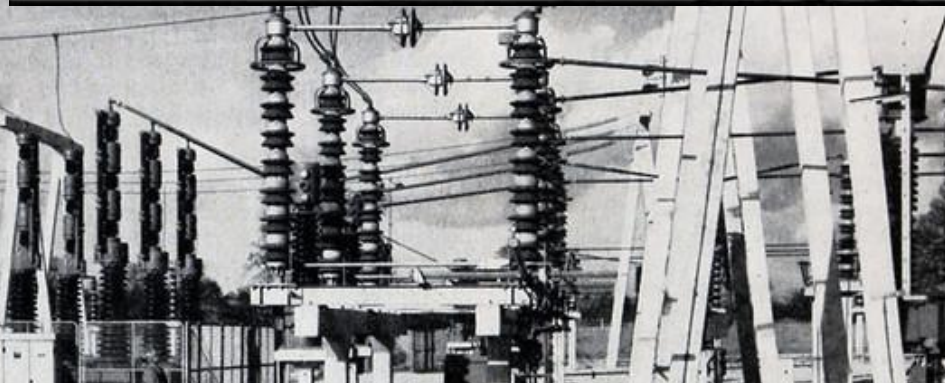
	Wind	13600 MW	(45.1%)
	Solar	6400 MW	(21.1%)
	Nuclear	5100 MW	(16.8%)
	Gas	4100 MW	(13.6%)
	Biomass	890 MW	(2.9%)
	Other	100 MW	(0.3%)
	Hydro	41 MW	(0.1%)
	Belgium	0 MW	(0.0%)
	Coal	0 MW	(0.0%)
	France	0 MW	(0.0%)
	Ireland	0 MW	(0.0%)
	Netherlands	0 MW	(0.0%)



Energy Today

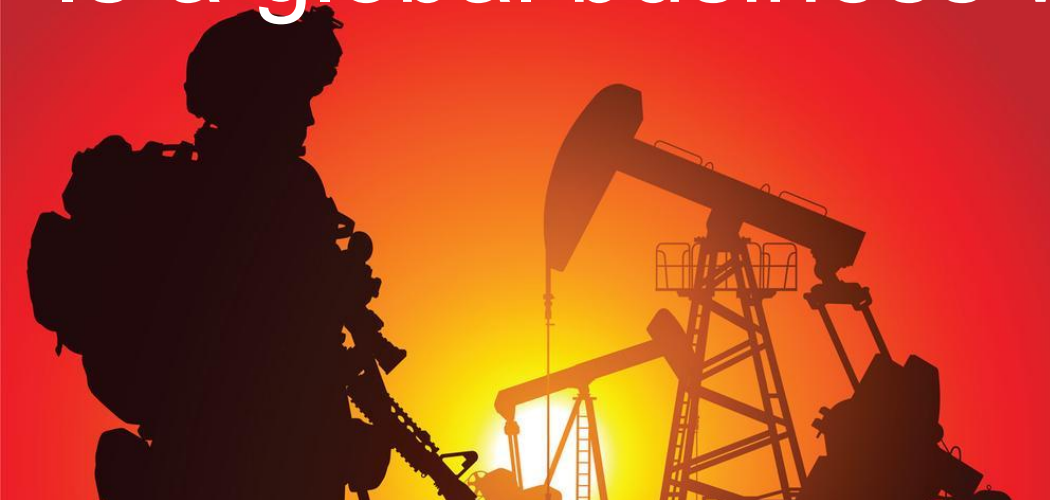


Is actually what our grandparents built



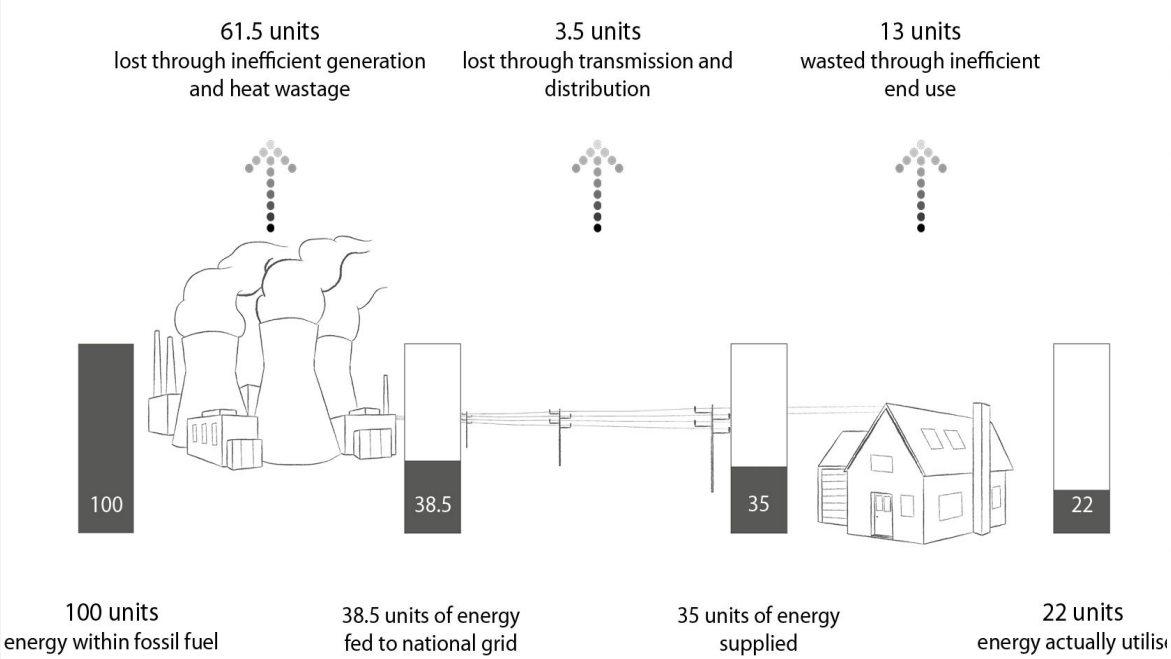


Is a global business with global impacts





Has a human impact in many places



Are gas stoves really dangerous? What we know about the science

New studies show just how harmful to health they can be, but there are good alternatives to the open flame



Doesn't really work too well



THE FUTURE OF ENERGY

CHEAPER

HEALTHIER

DYNAMIC **EFFICIENT**

DISTRIBUTED

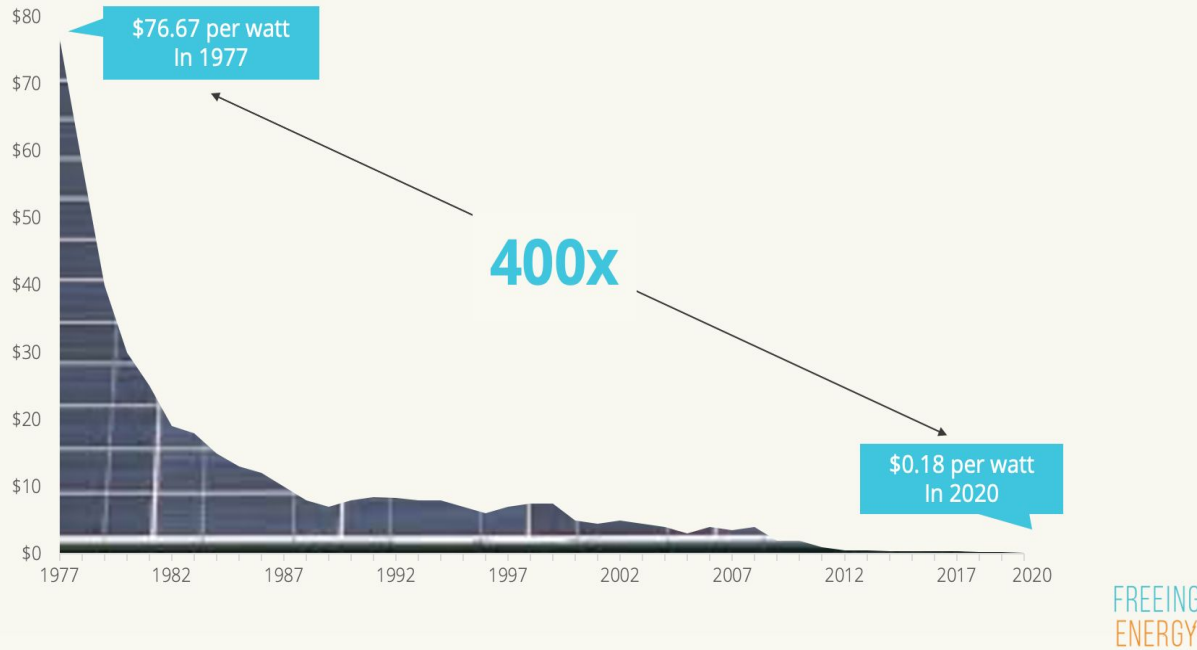
LOCAL

NETWORKED

RENEWABLE

Its cheaper

The cost of solar has dropped 400x



Sources: Bloomberg, NREL | <http://fep.link/g116>



↑ £ ↓

Demand & price

Demand

26.93GW

Price

£41.31/MWh

Environment

Emissions

56g/kWh

Temperature

16.76°C

Supply

Coal

0.04GW

0.12%

Gas

4.33GW

15.15%

Solar

2.07GW

6.89%

Wind

11.38GW

41.24%

Hydro

0.50GW

1.78%

Pumped Storage

-0.02GW

-0.17%

Imports & Exports

2.52GW

8.84%

Biomass

2.02GW

7.21%

Nuclear

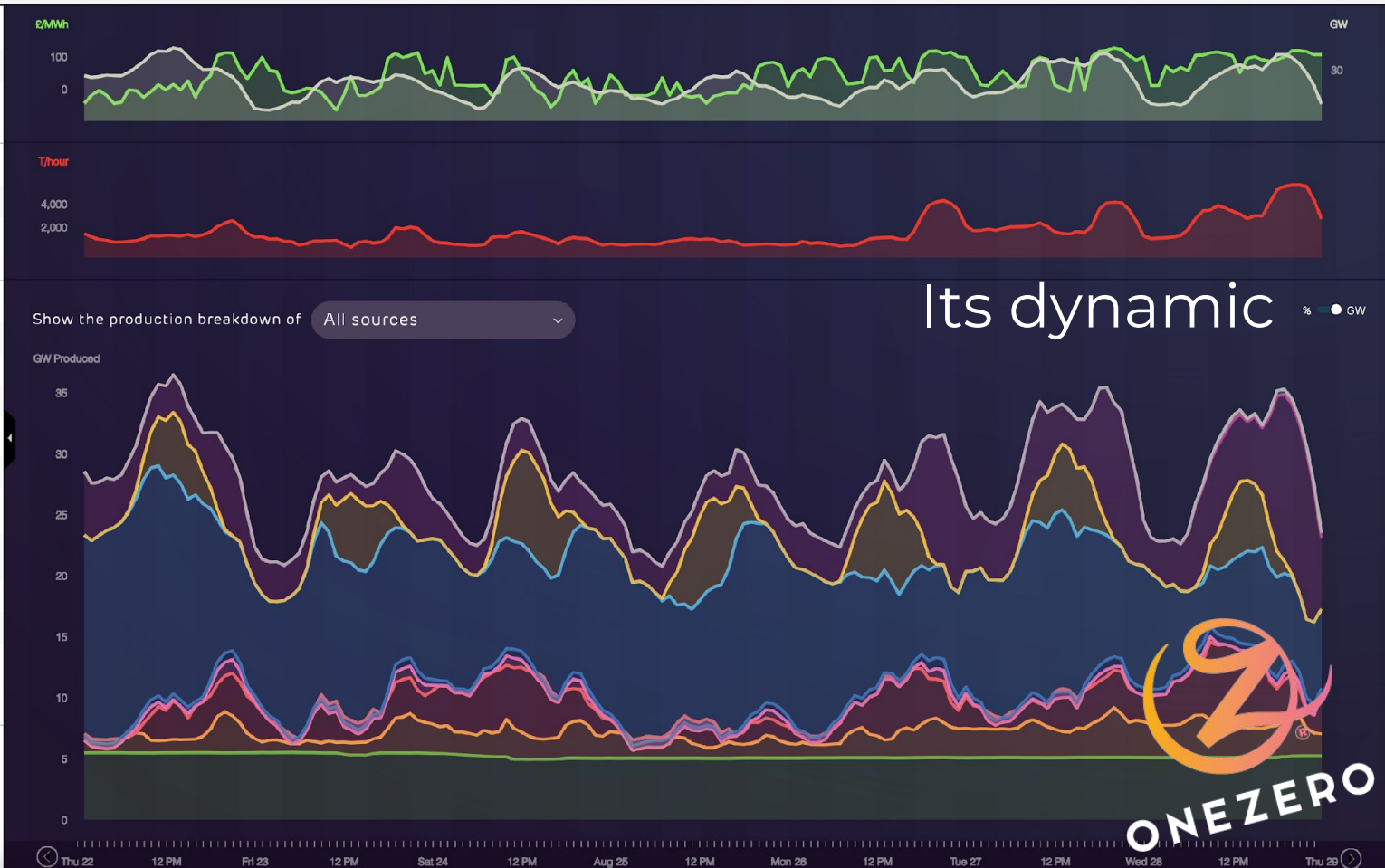
5.20GW

18.94%

Research

Quarterly Reports

Methodology and Sources





Its volatile



Its 300% more efficient
networked and distributed

THE FUTURE OF ENERGY

BUY IT ONCE

FIXED BILLS

RESILIENCE

**REDUCTION IN
EXTRACTION**

**HEALTHIER
COMMUNITIES**

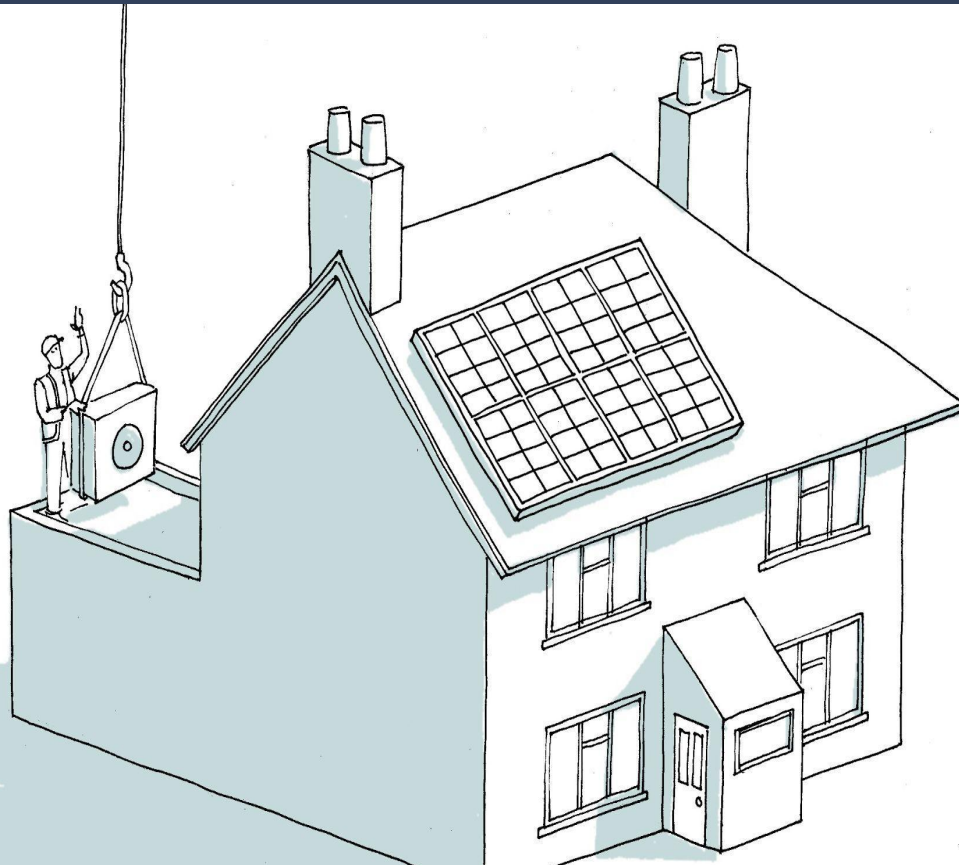
LOCAL JOBS

PEACE DIVIDEND



What's this
got to do
with us?

An invitation:

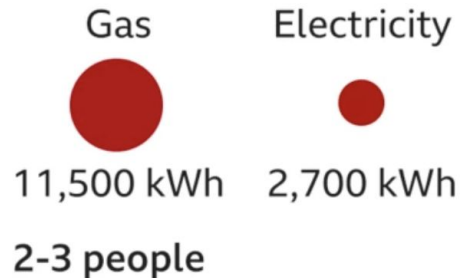


To put your
homes at
the centre
of the
energy
system

Medium
(Two to three-bedroom house)



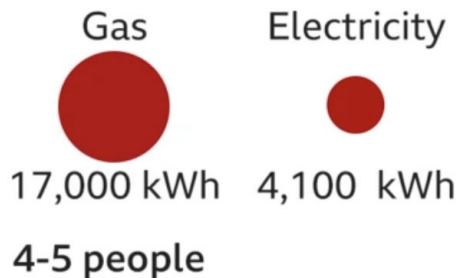
Approx annual cost*: £1,849



High
(Four + bedroom house)



Approx annual cost*: £2,612



Your bills:
£210million
Each year

Going to utilities and
fossil fuel companies



People Owned Power

Consumption Total

7,326.60kWh

Export Total

3,186.90kWh

Generation Total

6,683kWh

Import Total

4,674.90kWh

Imported energy 1400 kWhrs (down from 14000 kWhrs) total cost £700

Exported energy 3186 kWhrs income of £477

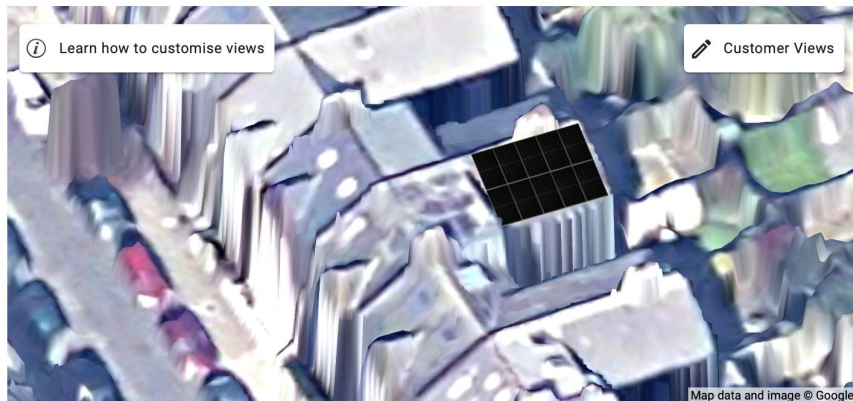
What does this look like in London?

5.25_{kW}
System Size

£1,407
Estimated Annual
Electricity Bill Savings

£8,307
Total System Price

£8,307
Net System Price



4.725_{kW}
System Size

£989
Estimated Annual
Electricity Bill Savings

£8,161
Total System Price

£8,161
Net System Price



What does this look like in London?

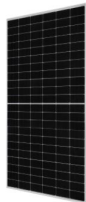
Your Solution

JAM 60D42 LB

5.250kW of Solar Power
10 x JAM60D-42-525-LB-TS-SF
525 Watt panels
12 Year Product Warranty &
30 Year Linear Performance
Warranty
4,642kWh per year

[Play](#) [Details](#) [Specs](#)

JA SOLAR



FoxESS H1 SERIES (G2) Hybrid Inverter

3.68 kW of Inverter Power
Fox ESS
1 x H1-3.7-E-G2

[Details](#) [Specs](#)



FoxESS EP5

5.18kWh of Battery Storage
Fox ESS
1 x EP5

[Details](#) [Specs](#)



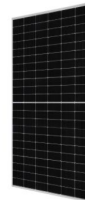
Your Solution

JAM 60D42 LB

4.725kW of Solar Power
9 x JAM60D42-525/LB
525 Watt panels
12 Year Product Warranty &
30 Year Linear Performance
Warranty
4,190kWh per year

[Play](#) [Details](#) [Specs](#)

JA SOLAR



FoxESS H1 SERIES (G2) Hybrid Inverter

5 kW of Inverter Power
Fox ESS
1 x H1-5.0-E-G2

[Details](#) [Specs](#)



FoxESS EP5

5.18kWh of Battery Storage
Fox ESS
1 x EP5

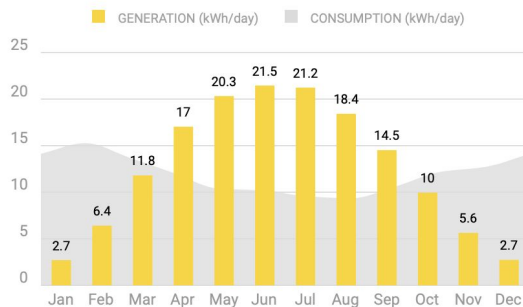
[Details](#) [Specs](#)



What does this look like in London?

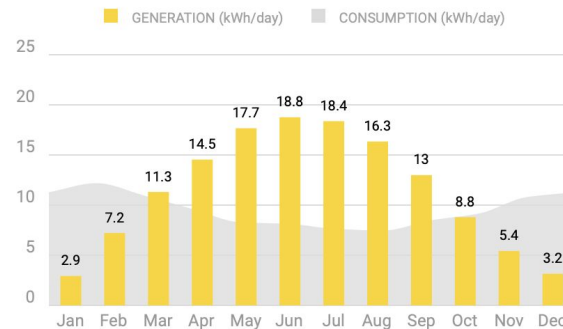
System Performance

106%
Energy From Solar



System Performance

120%
Energy From Solar



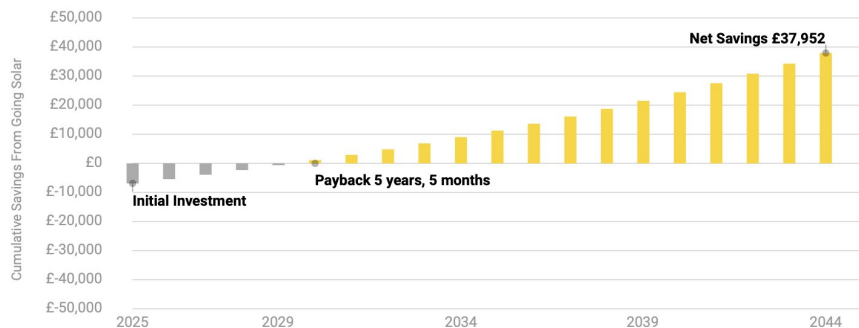
What does this look like in London?

Net Financial Impact

$$\begin{array}{rcl} \text{£46,259} & - & \text{£8,307} \\ \text{Utility Bill Savings} & & \text{Net System Cost} \\ \hline & = & \text{£37,952} \\ & & \text{Estimated Net Savings} \end{array}$$

Cumulative

Annual

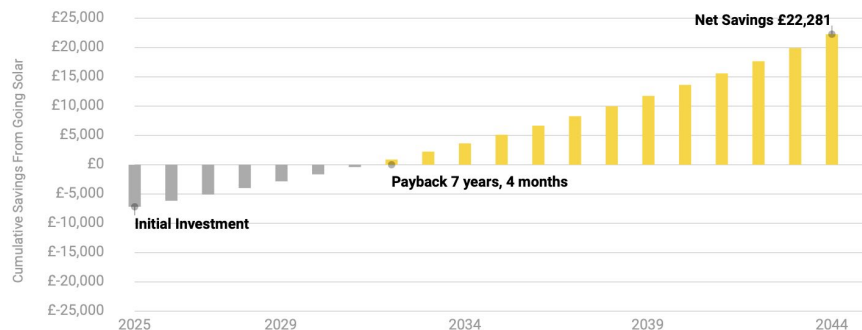


Net Financial Impact

$$\begin{array}{rcl} \text{£30,442} & - & \text{£8,161} \\ \text{Utility Bill Savings} & & \text{Net System Cost} \\ \hline & = & \text{£22,281} \\ & & \text{Estimated Net Savings} \end{array}$$

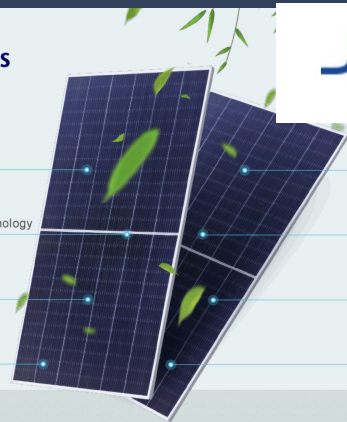
Cumulative

Annual



What Technology?

DeepBlue 4.0 Series

- 
- BYCIUM+ Cell
- High-density Encapsulation Technology
- Higher Power & Efficiency
- Lower Degradation
- Lower Temp. Influence
- Higher Bifacial Benefits
- Better Low-light Performance
- Excellent Reliability

JA SOLAR

Fox ESS BATTERY | EPS

EXPANDABLE SYSTEM 01

Scalable to 20.8 kWh.

90% DOD 02

90% Depth of Discharge.

HIGH EFFICIENCY 03

High voltage and high efficiency.



04 IP65

IP65 protection level.

05 EASY INSTALLATION

Compact & easy installation.

06 INSTALLATION LOCATION

Floor or wall mounting.

Solar + Battery + Smart Controls + EV Charging

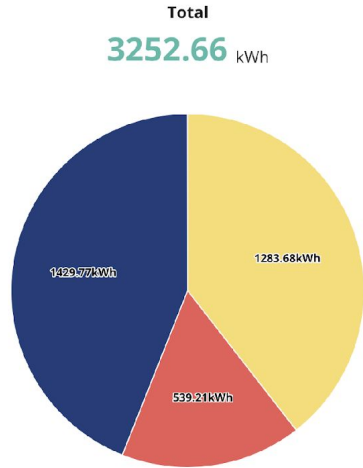


What Technology?



Air Source Heat Pumps + Natural Insulation + Smart Controls

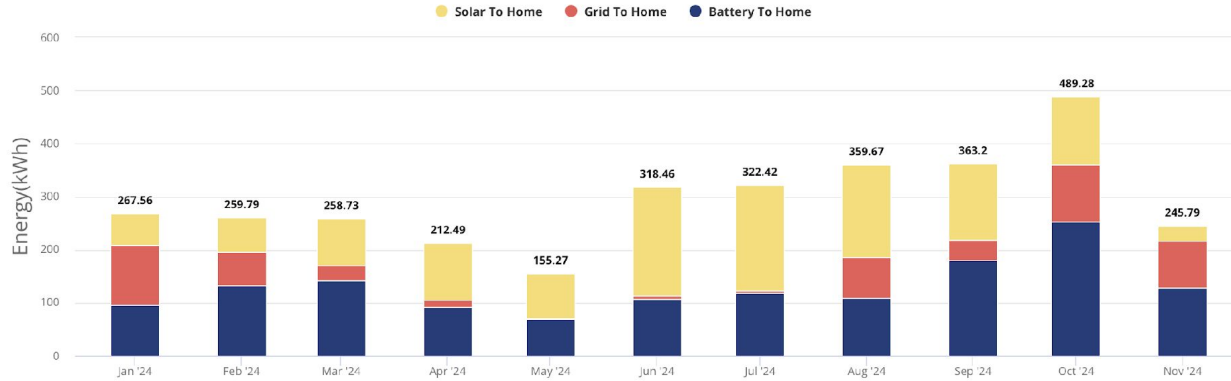
What does this look like?



Solar To Home
1283.68
kWh

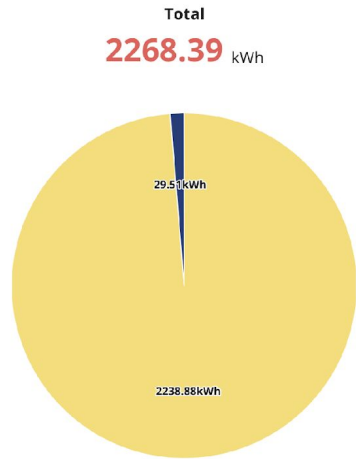
Grid To Home
539.21
kWh

Battery To Home
1429.77
kWh

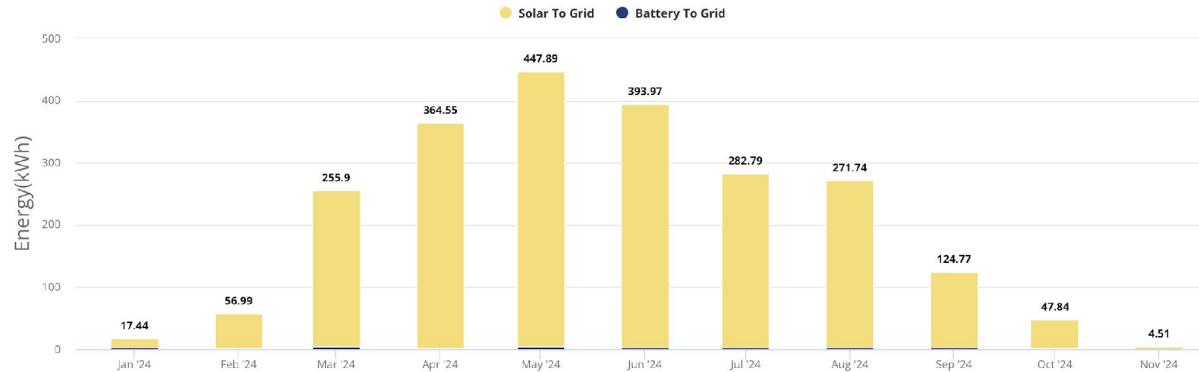


What does this look like?

Solar export worth over £300

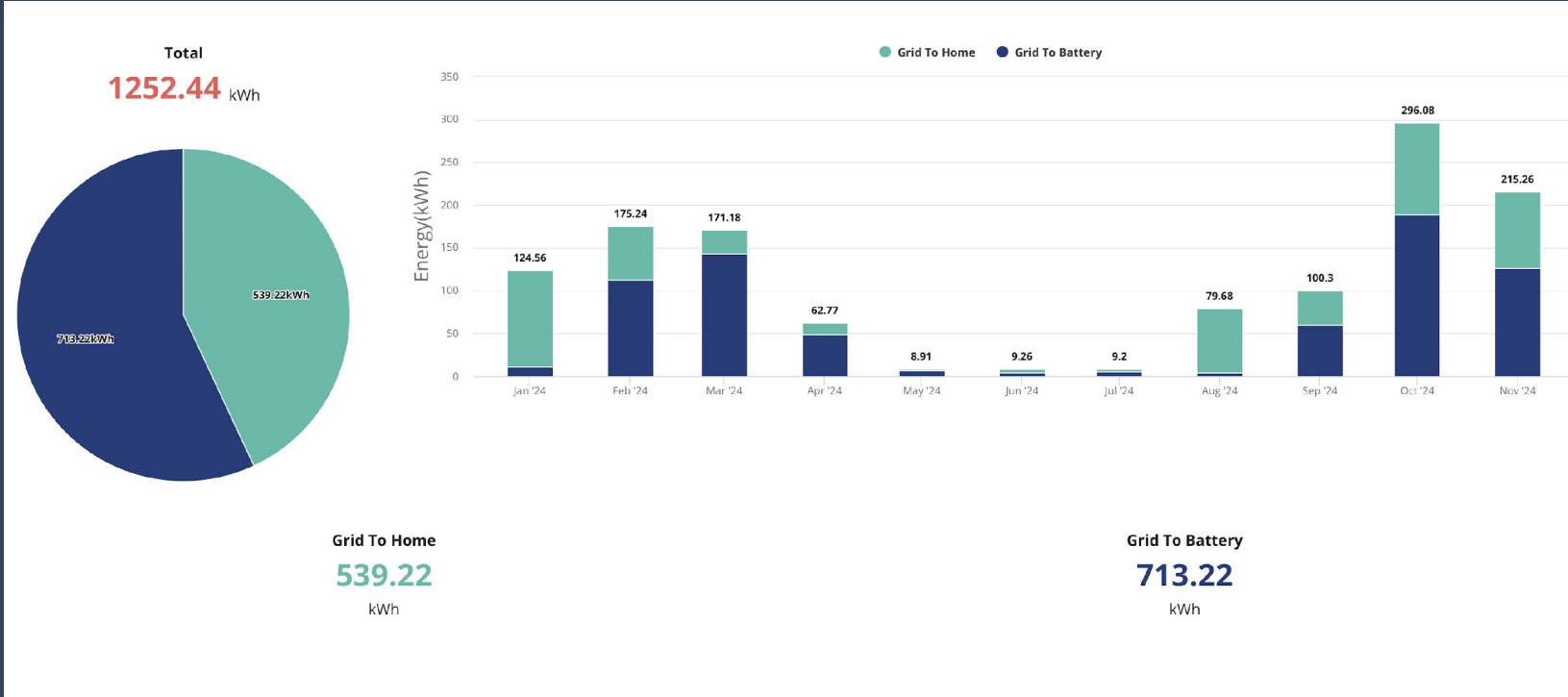


Solar To Grid
2238.88
kWh



Battery To Grid
29.51
kWh

What does this look like?
Import massively reduced – gas gone completely



What about the money?

Average £2000 bills per house

At least £1500 each year possible in saving

£16.5-20k investment

£7.5k grant

£9-12.5k upfront

50-70% CO2 reduction day 1

5-7 years to liberate ourselves of bills

£210M per annum being lost from this community
Channel this to fix our bills - forever

1. Fund it yourself
2. Mortgage extension
3. Onezero subscription

Local finance scheme – could we invest in our neighbours retrofit?

Add value to your home - EPC band jump adds more than the capital cost to the value of the home

Who can do it?

Delivered by local
people
mentored by us





Together creating a Virtual Power plant

**Managing our systems to
reduce imported energy
costs**

**Aggregator to maximize
flexibility income and grid
services**





Revolutionary Act





Peoples Owned Power

10 Streets



10 Steet Leads



20 Local trades trained to deliver
Peoples Owned Power

Are you up for running the process



Street lead process

Face to face conversations

Promoted through closed social groups

Free designs, finance options

Tradespeople recruitment

Get it built

Surface the data

Loose the carbon and the fossil fuels

Power to the
People

Peoples Owned Power



howard@onezero.energy

